

**AMENDMENTS TO THE SPECIFICATION:**

Please replace the paragraph beginning on page 10, line 31 of the specification with the following amended paragraph:

Meanwhile, the LDA method is the method that can effectively represent between-class disperse (disperse between classes (persons)) having different identities and, therefore, can distinguish the variation of face images caused by the variations of identities from the variations of face images caused by the variations of other factors, such as the variations of illumination and impressions. LDA is a class specific method in that it represents data to be useful to classification. This method can be accomplished by calculating a transformation that ~~that~~ maximizes between-class scatter while minimizing within-class scatter. Accordingly, when a person tries to recognize a face image under an illumination condition different from that at the time of registration, the variation of a face image results from the variations of illumination, it can be determined that the varied face image belongs to the same person. Here is the brief mathematical description of LDA. Given a set of  $N$  images  $\{x_1, x_2, \dots, x_N\}$  each belonging to one of class  $C \{X_1, X_2, \dots, X_C\}$ , LDA selects a linear transformation matrix  $W$  so that the ratio of the between-class scatter to the within-class scatter is maximized.

Please replace the paragraph beginning on page 17, line 18 of the specification with the following amended paragraph:

The face image retrieving apparatus of the embodiment of the present invention may be divided into a cascaded LDA transformation unit 10, a similarity determination unit ~~[[30]]~~20, and an image DB 30 in which training face images are

stored. A face descriptor  $z$  of an input query face image is calculated through the cascaded LDA transformation unit 10. The similarity determination unit 20 determines the similarities between the calculated face descriptor  $z$  of the query face image and face descriptors  $z_i$  of the training face images stored in the image DB 30 according to a certain similarity determination method, and outputs retrieval results. The output retrieval results are a training face image with the highest similarity, or training face images that have been searched for and are arranged in the order of similarities.